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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,252	08/11/2006	Anders Edgren	PD53612US01	6926

58561 7590 09/23/2008

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EXAMINER	
TRINH, TAN H	

ART UNIT	PAPER NUMBER
2618	

MAIL DATE	DELIVERY MODE
09/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,252	EDGREN, ANDERS	
	Examiner	Art Unit	
	TAN TRINH	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06-24-2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims1, 3-5, 6-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dufosse (U.S. Pub. No. 2002/0136398).

Regarding claims 1 and 10, Dufosse teaches an electro-acoustic communications unit for producing desired frequency characteristics in alert and phone mode (see fig. 1, page 2, sections [0032-0034]), comprising: a housing with a wall defining an interior (see fig. 1, page 2, sections [0032-0035]), having a certain volume page 1, sections [0005-0013] and page 2, section [0033]), and an exterior (see page 2, sections [0032-0034]), an acoustic driver for generating acoustic signals (see page 1-2, sections [0005 and 0032- 0033]), the acoustic driver being mounted to the wall (see fig. 1, page 2, sections [0032-0036]), an acoustic port (7-8) (see fig. 1, page 1, sections [0032-0033]), having a length and a cross-sectional area (see fig. 1, page 1-2, sections [000010-0013 and [0032-0039]), the port (7-8) penetrating the wall (6) and connecting the interior (3) of the housing with the exterior of the housing (see fig. 1, page 2, sections [0032-0039]), wherein the housing defined by the wall is tightly sealed (10) and that the volume (sealed 10) see fig. 1, page 2, section [0036]). In this case, the sealed 10 is sealed and volume is that sealed is related to acoustic driver (4). And length (5) and cross-sectional area are dimensioned in relation to the acoustic driver (4) in a way such that the electro-acoustic communications unit achieves desired

frequency characteristics in the phone mode (see fig. 1, page 1-2, sections [0014-0016, 0032-0039]), that is when engaging the exterior end of the acoustic port of the electro-acoustic communications unit with a user's ear (see fig. 1-2, page 2, sections [0032-39]), wherein the desired frequency characteristics comprises an increase of the high-frequency performance level relative to the performance of a communications unit alone (see fig. 1-2, page 2, sections [000036-0039]). In this case, the first aperture (7) and the wall (6), this dimension is less than the average width of the human ear and thus enables a user to place their ear over the apertures (7), the sound quality perceived by the user is improved even in discreet earpiece mode. That is obvious to the frequency characteristics comprise an increase of high-frequency performance level relative to a performance of a communications unit alone.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the above teaching of Dufosse, in order to provide user the sound quality perceived by the user is improved (see suggested by Dufosse on page 2, section 0038]).

Regarding claim 2, Dufosse teaches the acoustic driver (4) has a first side directed towards the interior of the housing defined by the wall (opposite of wall 6), and a second side directed towards the exterior (7) of the housing defined by the wall (6) (see fig. 1), and wherein the first side of the acoustic driver (4) is arranged to drive acoustic signals into the interior of the housing (see fig. 1, page 2, sections [0032-0036]). In this case, the cavity 5 (sealed) can be the first side directed towards the interior of the housing defined by the wall (6) and wall (10).

Regarding claim 3, Dufosse teaches the acoustic port (7 and 8) is adapted to make use of the acoustic signals driven into the interior of the housing (see fig. 1-2, page 2, sections [0032-0038]).

Regarding claim 4, Dufosse teaches the acoustic signals generated by the second side of the driver, are directed to dissipate without being used by the user (see fig. 1, page 2, section [0034]).

Regarding claim 5, Dufosse inherently teaches the volume (3) of the housing is of the order of between 0.5 and 10 cubic centimeters (cm.sup.3), the length (L) of the acoustic port of the order of between 0.5 and 20 centimeters (cm) and the cross-sectional area (A) or the acoustic port of the order of between 1 and 120 square millimeters (mm.sup.2) (see fig. 1, page 2, sections [0036-0039]).

Regarding claim 6, Dufosse teaches the electro-acoustic communications unit comprising a portable communication device (1) (see fig. 1, page 1, sections [0031-0032]).

Regarding claim 7, Dufosse teaches the portable communication device is a mobile phone (1) (see fig. 1, page 1-2, sections [0005, 0011 and 0031-0032]).

Regarding claim 8, Dufosse teaches the portable communication device is adapted to attenuate the acoustic signals generated by an exterior side of the driver (4), with respect to the housing wall (6) (see fig. 1, page 1, sections [0007-0010]).

Response to Arguments

3. Applicant's arguments with respect to claims 1-8 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Applicant agues that the reference of Dufosse does not teach the housing of acoustic of driver (4) is not sealed and is not show the volume and the length in the wall defining an internal, and the desired frequency characteristics does not increase of the high-frequency performance however, the examiner does not agree, Since the of Dufosse teaches the housing of acoustic of driver (4) is sealed and the housing defined by the wall is tightly sealed (10) and that the volume (sealed 10) see fig. 1, page 2, section [0036]). In this case, the volume is the sealed area 10, and the length of the volume is equal to the length of driver (4) (see fig. 1), and the first aperture (7) and the wall (6), this dimension is less than the average width of the human ear and thus enables a user to place their ear over the apertures (7), the sound quality perceived by the user is improved even in discreet earpiece mode. That is obvious to the frequency characteristics comprise an increase of high-frequency performance level relative to a performance of a communications unit alone. (see attached fig. 1 below to show the volume and sealed area).

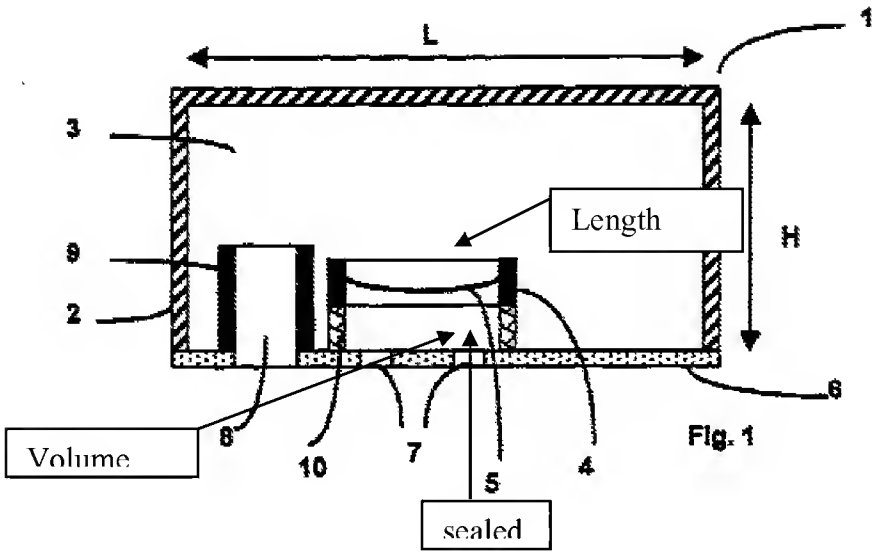

Fig. 1

Conclusion

4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to the Customer Service Window (now located at the **Randolph Building, 401 Dulany Street, Alexandria, VA 22314).***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh
Division 2618
September 13, 2008

/TAN TRINH/
Primary Examiner, Art Unit 2618
09-13-2008